

209801P K. XV 18/d Dental the state of the second





DISSERTATION

A

at an i i i i

ON

ARTIFICIAL TEETH IN GENERAL.

EXPOSING THE

DEFECTS AND INJURIOUS CONSE-QUENCES OF ALL TEETH MADE OF ANIMAL SUBSTANCES,

THE CORRUPTIBILITY AND DANGERS OF WHICH ARE AT PRESENT ACKNOWLEDGED BY THE FACULTY;

THE SUPERIOR

Advantages of Teeth made of a Mineral and Incorruptible Compofition are fully demonstrated, approved, and recommended

ВΥ

THE FACULTY AND ROYAL SOCIETY OF MEDI-CINE, BY THE ACADEMIES OF SCIENCES AND SURGERY, AND BY MANY EMINENT PHY-SICIANS AND SURGEONS IN PARIS, LONDON, &C.

By M. DUBOIS DE CHEMANT,

SURGEON OF PARIS, RESIDING AT PRESENT IN LONDON, AND INVENTOR OF THOSE TEETH, FOR WHICH HE HAS OBTAINED HIS MAJESTY'S ROYAL LETTERS PATENT.

LDRDDR:

Printed by J. BARKER, RUSSELL-COURT, DRURY-LANE: And may be had of the AUTHOR, No. 1, Frith-street, Soho; and of A. DULAU and Co. Bookfellers, No. 107, Wardour-street.

1797.

EXPLANATION OF THE TWO PLATES.

Represents: Fig. 1.

10

- 1. A compleat fet of teeth. A, the gums-B, the gold fprings.
- Fig. 2. Four teeth. A, the gums—B, the thread by which they are fastened.
- Fig. 3. A tooth with a pivot, and without gums. A, the pivot by which it is fixed to the root.
- Fig. 4. A tooth with gums. A, the gum—B, the thread which fastens it.
- Fig. 5. A palate and two teeth. A, the gums, and part of the vomer-B, a gold band, the ends of which form two branches like hooks, by which it is fastened to the natural teeth.
- Fig. 6. A tooth with gums. A, the gums—B, a gold band fomewhat bent, by which it is fastened at the infide of the natural teeth.
- Fig. 7. A palate, with the veil of the palate. A, the flaps of the veil of the palate—B, the hinges which join them to the middle part, by which they may be opened or flut at pleasure, by means of a key which moves a fmall gold band fixed to a pivot—C, the palate—D, the bands by which it is fixed to the natural teeth.
- Fig. 8. Two teeth with gums. A, the gums—B, the thread by which they are fixed to the natural teeth.
- Fig. 9. Part of an under set of teeth made of three pieces, joined together by a gold band. A, the gums-C, the gold band.
- Fig. 10. Seven teeth. A, the gums-B, two gold bands like hooks, by which they are fixed.
- Fig. 11. A nofe. A, the nose—B, the steel spring which passes behind the nape.
- Fig. 12. A mouth, of which the under lip, the teeth, and chin, are artificial, and all of a piece.
- Fig. 13. A large palate with nine teeth. A, the gums, and 'the part of the vomer which feparates the noftrils B, the gold bands by which it is fixed to the natural teeth.
- Fig. 14. Ten teeth, with a small part of the gums, fixed by two gold pivots.
- Fig. 15. A set of under teeth. A, the gums-B, two gashes where the gold bands are placed, to which it is fixed.
- Fig. 16. A compleat fet of upper teeth, kept up by a gold mechanifm, fixed on the natural teeth of the under jaw-bone. A, the gums—B, the gold fprings— C and D, the mechanifm.







Digitized by the Internet Archive in 2018 with funding from Wellcome Library

https://archive.org/details/b30386949

ADVERTISEMENT.

THE fuccefs attending the new discovery of artificial teeth formed of a mineral substance, in this kingdom, during seven years that the author has been established in it, and the confidence obtained from several of the nobility and the public in general, has determined him to continue resident in this metropolis, where he has obtained from his Majesty an act of naturalization, and he takes this opportunity to make the most respectful acknowledgements for the patronage he has received, by submitting the present work to attentive consideration.

. In order to prove the superiority of the invention, to every thing of the kind which has hitherto been practifed, it is thought necessary to place at the end of the Disfertation, the approbations and recommendations of the Academy of Sciences, and of the Faculty and Royal Society of Medicine at Paris; as also some of those which have been given by eminent physicians and surgeons, who have been eye-witnesses of the success of the operations: of this number are Dr. REYNOLDS, Dr. VALANGIN, Sir WALTER FARQUHAR, Dr. ROWLEY, Dr. MOORE, Dr. POIG-NAND, Dr. PEARSON, Physicians of London; Meffrs. JOHN HUNTER, TOMKINS, EARLE, YOUNG, CORP, MOORE, BRAND, and SAUMAREZ, Surgeons of London, as also Mr. MARCH, Surgeon-dentist in this metropolis; Mr. YOUNGE, and Mr. GROOT, Apothecaries. In France; Mr. FOURCROY, Mr. PETIT, Mr. DARCET, Mr. VICQ D'AZIR, Physicians of the Faculty of Paris; Mr. Louis, Surgeon of Paris; Mr SABBATIER, principal Surgeon of the Hospital for disabled soldiers at Paris; Mr. BRADOR, Surgeon at Paris; Mr. DE-SAULT, principal Surgeon of the Hotel-Dieu at Paris; Mr. SUE, principal Surgeon of the Charity-Hofpital; Mr. BEAUPREAU, Surgeon-dentift at Paris.

If the names of more than three thousand perions could with propriety be mentioned, who make use of the new invented teeth, which are the subject of this Dispertation this approbation would fully prove the superior advantages of teeth formed of mineral passe: but preserving inviolate those bounds the confidential duties of the profession prescribe, no patient's name can be pronounced without the most express permission.

As no perfons can legally attempt to imitate the mineral-paste teeth, until the expiration of the time allotted for the patent granted by his Most GRACIOUS MAJESTY to the author, it may happen that some artists, confulting their own immediate interests, will try to depreciate this useful invention to those who may require artificial teeth. In order to obviate every possible objection, the author informs the public, that no perfon Shall be obliged to take the teeth that may be bespoke, if, although they be made according to the rules of our new art, he should not like them. If such case should happen, they will be formed again, it being the author's wish that all prsons be fully satisfied. It is not doubted, that when the time for his Majetty's Royal Patent may be expired, those who now may attempt to decry the merit of the present invention, will be the first to recommend them, and to lay aside the use of teeth made of animal substances, in favour of the mineral paste teeth: as however some time must elapse before they may be enabled to carry such projects into execution, and as a long experience may be necessary to qualify the artists to operate with success, the author is under no apprehension of being deprived of the advantages of this important discovery.

N. B. The author refpectfully acquaints his annual fubfcribers, that they will find him at home, on Mondays, Wednefdays and Saturdays, from ten till two o'clock; and those perfons who only wish to confult him, will find him on other days from twelve till two.

DISSERTATION

ΟN

THE UTILITY OF ARTIFICIAL TEETH.

AMONG the number of charms which constitute perfect beauty, if the eyes, commonly called the mirror of the foul, are justly confidered as holding the first rank, the teeth, which may be called the index of health, appear to have a fimilar prerogative, and to be reckoned among the advantages which more particularly attract notice. Whoever could be so fortunate as to discover an infallible method of preferving them always found and beautiful, would certainly make a difcovery much more precious and beneficial to mankind, than that which is now offered to the public. The number of evils which precede or accompany the lois of natural teeth would vanish away, and thus the human species would be relieved from an effential part of their numerous afflictions.

But unfortunately, all the refearches, which have been made hitherto, either by fcience or industry, for preferving the teeth found, have proved abortive; either because the difeases of the teeth are of the same nature as the others, to which the human body is sub-

ject, of which some finally become incurable; or because many people are negligent in having their teeth cleaned, which are covered with tartar, and fuffer particles of food to remain between them, which getting putrid, make the fubstance of the teeth carious, with more or less rapid progress. The rottenness or cariousness of the teeth, after having caused a bad smell, frequently occasions an unsupportable pain, which forces the fufferer to have them extracted. In short, the sockets of the maxillary bones are also affected by disease, which cause the natural teeth to drop out, although they be very found. The defign of this work however, being only to fpeak of artificial teeth in general, and in particular, of the inconveniences of those kind of teeth as supplied by other artifts, compared with the advantages of the present new 'discovery; the particulars of all the different difeases, which affect the teeth, shall not, at present, be explained, but a compleat treatife, the refult of long observation and immense practical experience, shall hereafter be published.

When through fome accident or malady any perfon has had the misfortune of lofing one or feveral teeth, the neceffity of getting them replaced is very foon felt, on account of their utility for maffication, the ufe of fpeech, and the ornament of the mouth. But amongft the many motives which induce people to ufe falfe teeth, there is one which perhaps never has been thought of, and that is, their utility to fuftain and fupport the natural teeth, which ftill remain.

Until the present, people fancied, with some appearance of reason, that artificial teeth made the natural loofe and drop out, and this confideration has hindered many perfons from making use of them, for fear of losing the teeth which were still remaining. As numerous practical facts carry the most positive conviction that they cannot produce this effect, it is incumbent to contradict this false notion, and it may be confidently afferted, that people have been led into this error, for want of knowing the true caufe of the falling out of the teeth. This is the reason, which now induces the author to prove phyfically, that it cannot be justly attributed merely to artificial teeth, but only to the manner in which they are made, and to the kinds of substances, which have hitherto been made use of to form artificial teeth.

All those fubftances indeed, being neither folid nor fufficiently durable to bear the friction occafioned by mastication, it must follow of courfe, that the artificial tooth becomes too narrow for the space which it should fill up, and confequently, larger or smaller intervals are formed between the artificial tooth, and the teeth to which it is fixed. These vacancies become larger daily, by the continual friction, which cannot be avoided in mastication, and the thread which fastens the artificial tooth to the natural, shrinking, forces them towards it, by which means they begin to get loofe, and finally come out of their sockets, without its being possible to hinder this accident. Little reflexion is therefore requisite to convince mankind, that the lofs of their natural teeth is not to be attributed to the artificial; but only to the manner in which they are made, and to the choice of the fubftances of which they are composed.

It is found by experience, that when those teeth are made with exactness and precision, of a folid and lafting matter, taken from minerals, instead of loosening the natural teeth, they on the contrary consolidate them, and consequently make them last longer.

The truth of the affertion can yet receive a new degree of force and evidence by the following comparison. Let the keys of a harpfichord be furveyed, the different ftops of which are too distant from each other, and it will be found, that by conftant use, the ofcillation will foon put the whole inftrument out of order.

If this comparison be applied to the teeth which stand by themselves, it will immediately appear, how much solidity they must acquire, when, whatever intervals may exist, are filled up by the applying of false teeth exactly made.

Perhaps it may be objected, that their weight might be fusceptible of making the teeth fall out, to which they are fastened. This may be answered by faying, that no instance of this nature has occurred, and it may be added, that their weight is so trifling, as to render such an event impossible.

t

ON THE UTILITY OF ARTIFICIAL . TEETH FOR MASTICATION.

As to the utility of artificial teeth, in regard to mastication, every perfon may conceive how very necessary and useful they are. Health depends as effentially on the good trituration which is made, as on the choice and use of food. The author of nature gave different forms to the teeth of men and beafts, that they might with the greater facility part and grind their food, before it passes to the stomach. The incifors pierce into and tear the food, the molares grind it and crush it as a mill would do, and their name is thence derived. Digestion is partly thus prepared by those combined helps, from whence proceeds a more favourable and good chyle; on which depends, in a great measure, good or bad health. Those who, through old age, have lost their teeth, are commonly subject to indigestions and stomach complaints, particularly in an age, in which exhausted nature stands in more need of making a good trituration.

The entire or partial lofs of our teeth, befides being a real deformity, has another inconvenience. It is impossible for those perfons to whom this misfortune happens, to chew properly, for the natural construction of the maxillary, or jaw-bones, hinders them from touching one another. They are fo far from being able to grind their food small, that they cannot even prefs it between the gums.

B

ON THE UTILITY OF TEETH, WITH RESPECT TO THE USE OF SPEECH, AND THE ORNAMENT OF THE

MOUTH.

If teeth be abfolutely neceffary for maftication, if they be the principal ornament of the mouth, they are not lefs beneficial for the ufe of fpeech. Old people, and those who have lost their teeth at an early period, are fo many proofs of this unquestionable truth. They cannot make any distinct and perfectly articulated found, and it often happens, that what they wish to express, cannot be comprehended.

ON THE INVENTION OF ARTIFI-CIAL TEETH IN GENERAL.

To reftore to man all the advantages of which he finds himfelf deprived by the lofs of teeth, and to remedy the inconveniences which this lofs brings along with it, recourfe has been had to artificial teeth, but fince human industry has contrived to make up this deficiency, this art has always been limited to the choice of animal substances: for this purpose, seahorfe's, elephant's, ox's, and calf's teeth, teeth extracted from dead human bodies, &c. &c. have been made use of, and even human teeth from living perfons. All these fubstances, though very good in appearance, foon rotted, became black, and caufed as pernicious a smell, as the miasmata which they produced were pernicious to health.

(10)

These facts, which professional men have often had occasion to verify, are nevertheles not known fufficiently, in general; for which reason, it is incumbent, for the advantage and instruction of the public, to expose those which have become the most notorious and authentic. I confider them to be more than sufficient motives to cause the dangerous use of the different animal fubstances, which dentists have employed till the present, to be henceforth entirely abolished; and as all effects have necessarily an efficient or occasional cause which produces them, it will be expedient to explain first, of what nature the animal substances are, which artificial teeth are made of. Chymistry proves evidently that those animal substances are formed of two principal parts, the one earthy, and the other gelatinous, a kind of glue, which cements the earthy part together. This gelatinous part being about fifteen times larger in bulk than the earthy *, is confequently more subject than the latter to the different alterations, which animal fubstances undergo. The natural heat of the mouth, and of food and drink, their operation, their acidity, and in fhort, the quality of the falivary juices, put this gelatinous part in a continual state of fermentation. All these causes, which are more or less destructive, ac-

* Those who defire to be convinced of this truth, may burn fifteen teeth in a crucible, and they will find that what remains after this operation, will not weigh as much as a common tooth. cording to the conftitution or flate of health of mankind, inceffantly acting either feparately, or altogether, foon occafion the diffolution and putrefaction of that dead fubftance. The *miafmata* and morbific particles, which exhale from the teeth of animal fubftances, are introduced into the flomach by our fpittle, and the air, which we breathe, carries likewife into the lungs, those very putrid *miafmata*, which, by that means, are abforbed into the mass of blood *.

Since I have fixed my refidence in London, I have had opportunities of making new obfervations and improvements conjointly with feveral eminent phyficians and furgeons. Thefe facts and obfervations confirm all that has been advanced, on the horrid fimell and the corruptibility of animal fubftances, through the rottennefs of the bones of the palate, and of the fockets of the jaws.

To corroborate this explanation, which I think adapted to give a new degree of force and evidence to my affertion, I will add the following facts.

1st fact. Of several patients, who were fent me by Mr. John Hunter, I shall only

* See J. H. Hunter's Treatife on Venereal Complaints, from page 391, to page 398, and the Medical Transactions, 3d vol. p. 328. Pancouke's edition of the French Encyclopedia, 67th delivery, the article furgery, vol. the 1st, part the 2d, page 405, where the inconveniences of teeth made of animal fubftances are mentioned, as alfo the danger of transplanting human teeth, and the advantages and falubrity of those of the new invention. mention one. He had violent pains in his ftomach, and his breath was fo putrid and infectious that it was fcarcely bearable. This was attributed to two partial fets of artificial teeth of a fea-horfe, which he had got placed between fome of his teeth that were yet remaining. Two days after I had removed them, the bad fmell entirely ceafed, and his health, which was already greatly impaired, foon was recovered.

2d fact. I have in the presence of Sir Walter Farquhar, drawn twenty-eight teeth from the mouth of the Duchels of *****. Those teeth were carious or rotten to such a degree, that in fome parts they were quite destroyed, and they produced an infectious and infupportable stench: the matter which discharged from them had rendered the internal edges of the fockets fo tender, that the teeth were turned fide-ways. Her Grace defired me to extract them, and the anxiety this noble lady suffered to be freed from this injurious mass of corruption, made her Grace determine, against my advice, to have twenty-fix teeth drawn in one fitting. Sir Walter affured me, he never faw a mouth in fuch a state, nor such extraordinary courage. Some time after, I made this noble lady a complete set of teeth of mineral paste. Her Grace was before subject to frequent pains in her stomach; the colour of her face was yellow and rather livid. These indispositions ceased, and in the space of a few months the lady recovered her complexion and health, as her Grace informed me in a letter, which she did me the honour to write, thanking me for the attention I had given to the cafe.

3d fact. Having been called to a confultation, together with Mr. Vicq d'Azir, phyfician to the Queen of France, to examine the mouth of a lady of quality, who having been more than fix months afflicted with a flow fever, was pining away in a state of marasmus, which altered her constitution daily. I found that the artificial teeth of animal fubstance, which she had, were become black, and exhaled a fetid and unfupportable fmell. As every thing which had been done till then, to cure this diforder, had been ineffectual, I did not hesitate to declare, that this fever was occasioned and continued by the absorption of the infected matter, or particles, which came off from the rotten teeth *. Mr. Vicq d'Azir agreed with me, that it was neceffary to have them removed; the fever ceased soon after. I then proceeded to place, instead of the teeth of animal fubstances, others, made of my mineral paste, and in the space of five or fix months, this lady recovered her complexion, and gathered strength and fulness of habit daily.

4th fact. Mr. Geoffroy, an eminent phyfician of the faculty of Paris, having fent me one of his patients, feventy years old, burdenfome to himfelf, and to all those who came

* See on this subject a Treatise on Venereal Complaints, by Mr. Fabre, eminent surgeon at Paris, page 249, the last edition.

(14 .)

near him, on account of the ftench of his breath. I remarked, that he had a complete fet of *human teeth* mounted on an *ivory bafis*. I advifed this gentleman not to make use of it any more. After having removed this cause of infection and sickness, I made him a complete set of teeth of mineral pass, and had the satisfaction to see him recover his health in a short time.

5th fact. A patient had a filver palate with a fpunge, which ferved to fix it in his mouth *; not being able to bear any longer the fetid fmell which conftantly attended him, he went and confulted the celebrated M. Default, principal furgeon of the Hotel-Dieu at Paris; this eminent man advifed him to come to me, which he accordingly did; I found, by examining him, that the infection proceeded from the *mucus narium*, &c. which impregnated the fpunge, and which the patient could not clean, on account of the difficulty he found in taking off and putting on the palate. It was eafy enough to perfuade him not to ufe it any more. I made him another palate of mineral fubftance, which anfwered in the moft complete manner. The patient not only recovered his health, but had the double

* As no mechanifm had yet been invented fo fimple as the one of my contrivance, a fpunge had been made ufe of, to fix the artificial palate in the patient's mouth. This fpunge fwelling by the moiflure, kept up the palate, but at the fame time imbibed the humours that came from the noftrils, which being heated by their retention on the fpunge, were in a continual fermentation, or flate approaching to putrefaction. advantage of speaking with more facility, and of having a more sonorous voice, than when he made use of his filver palate *.

OBSERVATIONS ON THE PRE-CEDING FACTS.

If obfervation. Among the perfons to whom I have been called, together with Sir Walter Farquhar, fome were forced to have bones extracted from their palate, and rotten teeth. I have had the most complete proof of the corruptibility of animal fubstances, for as foon as those vacancies have been replaced by teeth and palates of my invention, the bad fmell ceafed, and the patients recovered their health.

2d obfervation. I preferve the remains of feveral fets of teeth made of animal fubftances. They all have evident marks of the diffolution and corruption, which is infeparable from their nature. They would get corrupted and diffolved, if they were to remain for any length of time in pure water, confequently, they must be more fo, being inceffantly exposed to the diffolving operation of the spittle, the breath, and the active particles of the air and food.

^{*} The fenfible difference in the founds which the patient articulated, as foon as he made use of my artificial palate, is a very natural effect, and very easy to be conceived. The spunge fixed to the solver palate, which he used before, absorbed the sound, and made it still hollower, when the spunge was imbibed with the *mucus narium*.

Thefe obfervations, and a great number of others which I have made, together with Meffrs. Sue and Sabatier, eminent furgeons at Paris, when I practifed furgery in that capital, and alfo fince I have been employed in the profeffion of a dentift, to which the fuccefs of my difcovery has determined me to dedicate myfelf entirely, authorize me to conclude, that the more a mouth contains rotten teeth, and artificial ones of *animal* fubftance, the greater is the mafs of corruption. A ftrong and healthy conffitution may fometimes not fuffer much, as may be feen in the endemic and epidemical diforders, but perfons, who are naturally weak and delicate, moft commonly fuffer more or lefs, or even fall victims to it.

ON THE DANGER OF TRANS-PLANTING AND USING HUMAN TEETH.

Modern furgery had contrived another method, and this was to draw found teeth from one individual, and to place them in another's mouth *. The accidents and diforders oc-

* Transplanted teeth can never recover life, as the public, and even fome practitioners were led to believe. True it is, that they can be fixed, and that they acquire a certain degree of folidity by the contraction of the lockets, which like all bony parts, have a tendency to draw near again to each other, but they always remain there as a ftrange body, not fusceptible of taking any root. For them to partake of the principle of life which preferves the other teeth, it would be neceffary that the nerves, the artery, and the veins, which gave blood, nourifhment and fensibility to cafioned by this practice, as dangerous as it is immoral, have had fuch fatal confequences, that I think I cannot make them too public. I alfo requeft thofe perfons, who wifh to be more enlightened in this matter, to read what Mr. *John Hunter* has written on this fubject. This eminent furgeon, in his Treatife on *Venereal Difeafes*, which he publifhed in the beginning of the year 1786, gives fix inftances of diforders and extraordinary fymptoms in fome perfons, who ufed human tranfplanted teeth. He affirms, that feveral gentlemen of the profession have been of opinion, through divers circumftances, that they contained a venereal or fcrofulous virulency, &c.

Those accidents, fay fome authors*, have always commenced by an ulceration of the gum, fome weeks after the transplantation, and after the tooth had got perfectly firm. The ulceration, which uncovers the root of the

the extracted teeth, fhould exactly meet and unite those which are transplanted, and make one body with them, fo as to re-establish the circulation of the blood and nervous influence in those parts, which is impossible. Such a supposition is absurd. Experience proves on the contrary, that they are more fubject than the others, to fpoil, either by getting yellow or black, or by rotting, &c. The observations made by me on different teeth, which had been transplanted, have convinced me that no fuch thing exists as the reviving of a veffel, for after I had cut feveral of those transplanted teeth through the middle from one end to the other, I difcovered no trace of a veffel in the canal. These facts determine the subject beyond all doubt, but even anatomical reasoning must shew that a regeneration of nerve, artery and vein, is impossible.

* See the French Encyclopedia, 67th delivery, Surgery, vol. 1, 2d part, page 406, and 407. tooth and the focket, foon fpreads to the neighbouring parts: the teeth fall out, the fockets become rotten, ulcers are formed in the throat, and blotches break out on the fkin, as it happens in venereal difeafes: exoftofes are formed, and befides those fymptoms, a flow fever comes on, with agitations, want of fleep, head-aches, and loss of appetite, &c. These accidents have been cured in fome people by mercury, and in others without it, but the first precaution, when this diforder appeared, was always to extract the teeth which were the caufe of it.

If all those symptoms or accidents have been produced by sound teeth, drawn from persons, who had never been afflicted either with the venereal disease, or with scrofulous diforders, it is then certain that there exift in fome individuals, contagious impurities, which are unperceivable to practitioners, and which can only be discovered by the effects they produce. It is alfo certain, that in this cafe, irritation alone, may produce an inflammation in the gums, the throat, &c. and make the focket rot, by means of a tooth lately tranfplanted, which acts as an animal fubstance, the more heterogeneous as it is impregnated with strange blood. If then, it be proved, that the transplantation of one or feveral teeth can communicate the venereal virulency, or the fcrofulous infection, which existed in the person's blood from whom one or feveral teeth were taken, it is evident, that the dangerous practice of transplanting human teeth ought to be

C 2

(20)

for ever *banished* from the profession of a dentist, and they ought not to be made use of in any manner whatsoever*, either with pivots or otherwise.

ON THE ADVANTAGES OF INCOR-RUPTIBLE MINERAL SUBSTAN-CES, TO MAKE ARTI-FICIAL TEETH.

Being convinced of the multiplicity of accidents occafioned by teeth of animal fubftances, and furprifed at the little progrefs which art had made in this branch of furgery, I have dedicated myfelf entirely to it, and have made it the object of my particular refearches. I have multiplied my experiments, without ever having been difcouraged by the jealoufy of thofe whofe intereft it is to continue abufes, and to propagate the error of fo pernicious a practice, nor by the confiderable expences of the proceffes neceffary to perfect the difcovery. I have found amongft minerals, durable and uncorruptible fubftances, on which neither the air, the faliva, nor the active parts of food, make any impreffion, and on which, even the ftrongeft corrofives have no effect +. This

* I infift on this point in behalf of humanity, becaufe I am perfuaded that, in whatever manner human teeth are ufed, they are very dangerous. Their diffolution, occafioned by the fermentation which refults from the heat of the mouth, can inoculate the diffemper of the perfon out of whofe mouth they were taken.

† Aqua fortis is fo far from fpoiling the teeth made of this matter, that it preferves them in all their beauty, and (21)

matter is fusceptible of the forms, which are most proper for the important functions which are wished to be re-established.

In fhort, after many refearches, I have at laft difcovered means to make a mineral pafte, which is ductile and fufceptible of receiving the juft and exact imprefiion of the gums and pieces of teeth, without any need of extracting the latter.

I have fucceeded in giving to their fubftance, by a particular process, a degree of folidity, which renders it capable of refifting the greatest efforts without breaking, or producing any of the effects, which may follow from breaking, or from the exfoliation of the *animal fubftances* hitherto employed.

The colour which is given to this compofition is unalterable: the colour of gums can be exactly imitated, which is of the utmoft importance, the deficiency of the jaws remedied, and by imitating on the fubftance, formed at pleafure, the original colour, which is natural to the parts, neceffary to replace, a degree of perfection is obtained, hitherto unattempted.

CONCLUSION.

If it be confidered, that teeth made of a mineral fubstance have fo many other advantages, that of being eafily formed to fit

it is even the beft thing that can be made use of to clean them, when any extraneous substance sticks to them, and to give them their first brightness. It is sufficient to take them out of any person's mouth, and let them lay a few minutes in aqua fortis. well on the gums, is fingularly beneficial. A very fmall feparation is admitted to the *pafleteeth*, fo that no food can remain between them, and all forts of colours of teeth are fo exactly imitated, that they look exactly like the natural. Under fuch circumftances of real advantage, no reflecting and candid perfon will hefitate to give them that preference, which their incorruptibility alone entitles them to *.

In order to give, in an abridged view, an idea of the fuperiority of this new invention, to all methods that have as yet appeared to remedy the lofs of natural teeth, this differtation fhall be concluded by a parallel of the advantages and difadvantages of the different modes of fupplying artificial teeth, by which, the difcerning public will be enabled to decide on the *defects* of the old, and the *merits* of this new improvement.

A PARALLEL BETWEEN THE TEETH OF ANIMAL SUBSTAN-CES, AND THOSE OF MI-NERAL SUBSTANCE.

DANGERS OF TEETH MADE OF ANIMAL SUBSTANCES.

First. They are corruptible, and occasion continually a fetid fmell, which is infupportable to the patient, and to those with whom he converses.

ADVANTAGES OF TEETH MADE OF MINE-RAL SUBSTANCE.

First. They are uncorruptible, and never cause any bad smell in the breath; therefore, they are not suspected to be artificial.

^{*} See the French Encyclopedia, art. medicine, 67th delivery, vol. the 5th, part the 2d, at the word tooth, page 377, where the advantages of this *new* difcovery are fpecified.

Secondly. They wear out in a very little while and exfoliate. The fhort time they laft, and their want of folidity, force people to have new teeth made very often, which is the fource of repeated expences.

Thirdly. Their fubftances being bony, they must be worked with a file and burnisher, from whence follow several inconveniences: they can never take the exact form of the edges of the sockets, they occasion continual pains, they are so far from joining to the gums, that the victuals remain in all the empty spaces, and cause a fetid set.

Fourthly. The lofs of teeth caufes the edges of the fockets to fink down, and ruins the gums, from whence the deformity of the mouth refults. It is not poffible to remedy this deformity perfectly with teeth of animal fubftances; becaufe one can neither add the gums, nor give a natural colour to the teeth. Nor can the maffication of hard fubftances be with any force performed.

Fiftbly. Teeth of animal fubstances being fubject to corruption and rottenness, get loose from their *pivots*, because the holes which ferve to fix them become larger, and the teeth fall out: it often happens that they are swallowed down with food, and the pivot remains at the root, &c.

Sixtbly. Those teeth, which at first are very white, soon become very brown or black, and a striking contrast is perceived between them and the other teeth adjoining.

Secondly. They are extremely folid and hard: a compleat fet of teeth can laft a man's life, without being worn out, confequently the expence is trivial, compared with the neceffity of repeatedly having new fets of teeth.

Thirdly. Their fubstance being a paste, it is fusceptible of receiving the impression and the form of the edges of the sockets and of the gums, so that the artificial teeth, or sets of teeth, either partial or compleat, do not cause any pain by their pressure, and do not leave any empty spaces, where the sood can remain, or become corrupted.

Fourthly. With the mineral fubftance, there arifes the double advantage of being able to form artificial gums, and to give them a lafting colour, as alfo to the teeth; both which imitate nature fo accurately, as not to be difcovered from the original natural teeth and gums, and they answer all the purposes of even biting a cruft, or any aliment, without the least pain, or inconvenience.

Fiftbly. According to my method, the teeth, fuftained by gold pivots, can never get loofe from them, becaufe those pivots are riveted, and foldered to the passe itself, as if they were the fame body, with which they continue equally firm.

Sixthly. I give the new invented teeth the colour, which is proper to correspond with the natural, and that colour remains unalterable. With the mineral fubftance I can fuccefsfully make artificial palates, nofes, and every other part of the face * which may have been loft by accident: the colour alfo refembles nature.

The use of these articles is easy, and they fit perfectly, because the passe of which they are formed, is, as it were, moulded on the parts which they are to replace.

I shall now proceed to speak of the mechanism, and of the spring made use of to support the teeth, sets of teeth, palates, &c. which I have likewife invented. It was not enough to have at my difpofal a folid matter, and which could be moulded into any proper form; the springs made use of were defective, therefore, I have invented others, which are both folid and flexible: they are adapted to obey without any inconvenience all the motions of the jaws, even that of rotation, which other artifts had never been able to effect, and this has gained me the approbation of the Academy of Sciences +, and of many profef-fional men. I have also invented a very fimple and very folid mechanism to support a palate, or a set of upper teeth, either partial or compleat. In short, all the articles ‡ of this new

+ See the account of the Academy of Sciences, &c. &c.

‡ In order to form an idea of the chief articles and mechanifm of my invention, the two plates may be confulted,

^{*} I made for a phyfician's daughter, an artificial chin, which was examined by Dr. Poignand, and Mr. Young, furgeon. This young lady had loft in the fmall-pox, her chin with the under lip, and fome teeth, which accidents I perfectly remedied.

invention can be eafily taken out, and put in at pleafure, without occafioning the leaft pain. As I myfelf make every thing that concerns the different branches of mechanifm which belong to this new art, I can form them as perfect as poffible, proportioning the flexibility and elafticity of the fprings and mechanifm, agreeably to the tendernels of the gums.

Report of the Academy of Sciences concerning the Teeth, and sets of Teeth, of the new composition of M. Dubois De Chemant. Extracted from the Registers of the Royal Academy of Sciences, the 10th June, 1789.

" M. DARCET and I have been charged to examine the teeth, and fets, of a new composition, which M. Dubois De Chemant has prefented to the Academy, and to give in an account of them. The company has been able to judge as we have, that those teeth and fets very nearly imitate nature, as well by their form and colour as by the portions of artificial gums which support them, and to which M. Dubois De Chemant also gives a very great likeness to natural gums. But what merits for them a confiderable preference beyond all those which have been composed hitherto, is, that they are of a hard fubstance, upon which the faliva and the particles of food which remain in the mouth, have no effect; whereas the others, made of animal fubstances, and little resembling natural teeth, are eafily spoiled, acquire a dirty colour, and contract a smell as offensive as it is prejudicial to the health. The matter which M. De Chemant makes use of is a mineral paste, to which, after many effays, he has found means of giving a colour like to that of the teeth which he means to fupply. He can mould it into any form fo as to make whole fets, half fets, either for the upper or lower jaw; portions of fets, when there remain above or below teeth, which may be preferved, fingle, double, treble, or quadriple teeth, as necessity requires. The whole fets are put in motion by means of springs, of M. De Chemant's invention, which are very different from those used heretofore, and which not only separate the parts when the jaws are distended,

placed at the beginning of this work. Through fear of caufing confusion, I have been forced to omit in them feveral particulars, which are both useful and curious. but also allow the fide motions. These springs are applied to both fets, even to the upper ones, in a manner as simple as it is ingenious. A mechanism equally simple joins the parts of sets to the natural teeth which remain; and single, double, or treble teeth fit with the greatest facility, because M. De Chemant has found means of boring his passe so place pins in them, and to make any flides he pleases.

"His manner of taking measure of the teeth which he intends to replace, adds greatly to the merit of his invention. His process is fuch, that each piece is moulded, as it were, for the place which it is to fill; and as for the whole fets, half fets, or any other portion whatsoever, their base receives and furrounds the edges of the gums, or the part on which they are applied, so as to render their position very folid, and to prevent the painful prefure they may otherwise occasion. By this process he can preferve, as long as he pleases, the moulds of all his pieces, and can take very exact and precise measures of perfons at a distance whom he never faw; and provided he be informed exactly of the colour of the remaining teeth, he is fure to fend pieces which will fit with the greatest exactness, as well as if he had taken the measures and placed the teeth himfelf.

" M. De Chemant's paste is very folid; it cannot be broken between the hands, without employing very great strength. The fubstance of it produces fire with steel; it is not affected by acids. The weight of it is less than that of porcelain. M. Brisson, who has been pleased to determine it, found that a cubical inch of it weighed one ounce, two gros*, and fixtynine pennyweights; whereas the lightest china of Seve, of the feventeen kinds which he tried, weighs one ounce, three gros, and nine grains.

" Having examined the teeth and fets of teeth made by M. De Chemant, after seeing the manner in which he takes his measures and forms his moulds, having inquired into the springs and the means he employs to adapt his pieces, in order to justify the confidence laid in us by the Academy, we thought proper to see some pieces placed on; we therefore went ourselves to the houses of different persons who make use of them, and who have confented to be visited and to answer our questions. We have feen, teeth of every kind. The perfons to whom M. De Chemant conveyed us are all of a diffinguished rank, and of courfe beyond all fuspicion of any other views in what they told us than those of doing justice to truth. They assured us they felt no fort of inconvenience from the pieces they make use of, and that they became accustomed to them in a very short time, and with eafe. They use them to eat, and find them of affiftance in the action of chewing as well as of fpeaking, at the

* A gros is the eighth part of an ounce.

fame time that they remove the deformity arifing from the want of teeth. We have feen no perfon whofe pieces have either loft their colour or received any other hurt, by any bits falling off; and though that fhould happen, and fome fcraps fhould mix with the food, we think we may affirm, that nothing dangerous could refult from it, and that those particles may be fwallowed without any more danger than particles of bones of fish or any other animal, or any other hard fubftance which we are liable to fwallow in eating. There is then nothing to apprehend from the teeth or fets of teeth made by M. De Chemant, which moreover possibles all the advantages that can be defired.

"The Academy will, no doubt, permit us to conclude, from what has been faid, that the artificial teeth and fets of teeth, of M. De Chemant, deferve being approved by it, and that it would be proper that hiftory fhould mention the happy application he has made of a hard and incorruptible matter to an end fo ufeful as that of fupplying the want of loft teeth.

(Signed)

"D'ARCET and SABATIER. " At the Royal Academy of Sciences, June 10, 1789."

"I certify the prefent extract is agreeable to the original, and to the judgement of the Academy.

(Signed)

" The Marquis De Condorcer. " Paris, June 21, 1789."

Report of the Commissioners, appointed by the Faculty of Physic of Paris, to examine the new Teeth and Sets of Teeth, invented by M. De Chemant.

" Mr. Dean,

"We have examined the new artificial teeth and fets of teeth, which the Sieur De Chemant forms of a pafte of his composition, which he hardens by the fire; their hardness is fo great that they long result the hammer, and often produce fire, like flint struck with steel: no kind of acid can dissolve them; a piece, representing the whole set of the upper jaw, may be thrown against the floor, without breaking.

"The fets for the upper jaws are of one entire piece; the teeth are not feparated by real interflices; they are reprefented each according to its natural form, and a coloured fhade feems to feparate them. The gums are alfo perfectly imitated: on the edges of thefe fets, are fome inequalities which reprefent the upper extremities of the different kinds of teeth.

"By the form which the Sieur De Chemant gives his teeth, they perfectly refemble nature; he has also discovered the means of giving them the colour of the natural teeth, to which they are fubstituted, fo that they cannot be distinguished from the natural teeth of the perfon who wears them; and as the fubstance of which they are made is incorruptible, it loses none of its properties by time

"The whole fet, composed of an upper and lower jaw, is jointed by a spring, invented also by the Sieur De Chemant, by means of which both jaws move with great facility, and without any troublesome or inconvenient resistance to the bearer, in their different movements. We have seen a person wear an upper set, which sitted persectly, was no ways incommodious to the patient, who, whenever he spoke or laughed, seemed to have a beautiful set of teeth. We have also seen several teeth joined together, in the mouth of a person, who may be relied on, and who assured us, he could eat with those artificial teeth, as well as he formerly used to do with his natural ones.

"This invention of M. De Chemant's feems to us, to unite all the advantages, which perfons who want artificial teeth, can wifh for. When he is about to fupply the defect of one, or many contiguous teeth, he takes with his pafte, the length of the fpace to be filled, and the form of the edges of the gums, with the greateft precifion; he then forms a piece which fits fo exactly as never to incommode the wearer The hardnefs of the composition is fuch, that it never waftes by mathication, and its incorruptibility prevents it from being diffolved either by folid or liquid food: as the teeth are not feparated in their length, no parts of the aliments can remain amongft them.

" Hitherto dentifts had no other means of fupplying the want of teeth, than the bony substances of different animals, of which they formed either fingle teeth, or many teeth together, or whole fets of teeth; they took a part of a bone to form the piece they wanted, and made use either of a file or a faw to work it: when they intended to make a fet for either, or for both jaws, they gave a piece of bone the proper shape, and then marked with a faw on the furface, a line to imitate the fpace which commonly divides the teeth from each other; thefe teeth, particularly those of the fore part of the mouth, rather refembled the keys of a fpinnet than real teeth, and had a confiderable opening, as well at their upper end as in their whole length; parcels of food remained in them, fermented in the mouth, corrupted and exhaled an infectious fmell, as noxious to the patients themfelves, as intolerable to those, to whom they fpoke too closely.

"We think it proper to obferve, that the file and faw employed to fhape those teeth or fets of teeth, made of bone, by opening a great number of pores in them, where the juices of the mouth and aliments could penetrate, disposed them to corrupt in the mouth: it is a fact, that those bones fostened, corrupted, and wore away in the mouth. We have feen on the fame fet, two exfoliated teeth, and we lay before the faculty, an old fet, which we received from the Sieur De Chemant, which became foft and black in the mouth of the perfon who wore it.

"M. De Chemant's teeth have none of the inconveniences of those made of bone: they have the advantage of resembling perfectly the form of every kind of teeth, of representing the intervals without leaving any void space, of representing the gums, and fitting so exactly on the edges as never to be troubless to the wearer. We therefore think that the faculty should admit the discovery of M. De Chemant, as an invention which does much honour to its author, and must be very useful to those who are in need of the affistance of this new art.

(Signed)

" DESCEMET, BAGET, and PETIT RADEL."

Extracted from the Registers of the Eaculty of Medicine in the University of Paris.

"In the year one thousand feven hundred and eighty nine, on Monday the fecond day of March, the Fa ulty of Medicine affembled at five o'clock in the afternoon, in its upper ten ols, after having heard the report made to them by M. M. Defemet, Baget, and Petit-Radel, whom they had charged to examine the artificial teeth and fets of teeth, proposed by M. De Chemant, Surgeon and Dentift, has been upanimously of opinion, agreeably to the faid report, to approve the fame artificial teeth and fets of teeth, composed of a passe which the Steur De Chemant hardens by fire, fo that those pieces unite, at the fame time, beauty, folidity, convenience, and faubrity, qualities acknowl dged by the Commissioners, as well by the trials made upon the specimens prefented by the inventor, as by what they observed with perfons who have made use of them, and I have concluded in approving the fentiments of the facu ty.

" EDME. CLAUDE BOURU, Dean.

"On the part of M. M. the Deans and Doctors Regent of the Faculty of Medicine of Paris, I have affixed the fmall feal, the 5th of March, 1789.

(Signed) "CRUCHOT, "First Apparitor and Register Keeper of the said Faculty, in the University of Paris."

Paris, April 2, 1790.

" Experience confirms what I had the honour of telling you, Sir, when you informed me that fome perfon had advanced that the *bepar fulphuris* acted upon your artificial teeth, and made them black.

" I left two of those teeth during three days in a folution of *hepar fulphuris*. I withdrew them afterwards, and after washing them well, I found they had not undergone the least alteration. " I keep one of these teeth in order to make use of it occationally, if any other perfon should fay the *bipar fulphuris* affects them.

> " SAGE, " Of the Academy of Sciences, Director of the Royal School of Mines."

" I have weighed the fea-horfe tooth perfectly dry, and then imbibed with water. When dry, a cubic inch of it weighs 1 ounce, 1 gros, 14 grains. When imbibed with water, the cubic inch weighs 1 ounce, 1 gros, 54 grains; if it be compared with the matter of which M. De Chemant's teeth are made, the cubic inch of which weighs 1 ounce, 2 gros, 60 grains, the weight of the fea horfe tooth is found to be to the matter of M. De Chemant's teeth as 8 is to 9, or as 16 is to 18.

" I also weighed an under jaw made of M. De Chemant's composition. 1 certify it weighed but 4 gros, 34 grains; the two rows together will therefore weigh no more than 9 gros at most. In witness whereof I give the present certificate.

" BRISSON, Of the Royal Academy of Sciences. " Paris, June 19, 17,89."

A Letter addreffed to the Inventor, by Dr. Wm. Rowley, M. D. Member of the University of Oxford, the Royal College of Physicians in London, Author of the rational Practice of Physic, Schola Medicinæ Universalis Nova, Physician to the St. Mary-le-bone Infirmary, &c. &c.

To M. DE CHEMANT, No. 1, Frith-Street, Soho. "SIR.

" It is no lefs the duty of every phyfician to be as circumfpect in receiving novel doctrines, as to be difposed, liberally, to promulgate useful truths.

"Having known from long observation, that the substances with which artificial teeth are composed, occasion a fetid breath, inimical to the human constitution, I was happy to be informed by some perfons of rank and others, with whom I have the honour to be acquainted, that the artificial teeth, formed of Mr. De Chemant's composition, were not liable to many difagreeable inconveniences experienced from others, composed of fea horse teeth, &c.

"Not to be deceived, however, by first appearances, I waited two or three years, and examined from time to time fome cases, where the artificial teeth and coloured gums of Mr. De Chemant had happily and usefully supplied the loss of the natural, in perfons whose honour and probity were indubitable. " In order, however, to be more perfectly fatisfied of the nature of the composition, I procured some of Mr. De Chemant's artificial teeth, and immerged three pieces, separately, in the muriatic, vitriolic and nitrous acid, where, after they had remained a confiderable time, it appeared, that no effect whatever was produced on the composition, colour of the gums, &c. What the fluor acid might have produced, I had no opportunity of trying; but the above experiments were perfectly conclusive in all the points to which the examination was directed.

" The refult of these enquiries were:

" I. That neither foods, drinks, nor foul expiration air, could affect the composition.

" II. That the composition being moulded exactly to the shape of the deficiences to be supplied, they are likely to fit more accurately, than those manufactured from other substances.

" III. That the imitation of the gums is a real improvement, which cannot be imitated by the common methods of fupplying defects.

"IV. That in colour and durability, they are quite fuperior to the common artificial teeth, and by not imbibing the moifture of the mouth, &c. they do not occasion a stinking breath, which is not only difagreeable with whomsoever the parties converse, but, in some degree, by the inspiration of a putrid air, the human constitution may be materially injured.

" V. That, in general, the advantages expressed by the Academy at Paris, and by that learned and excellent forgeon Mr. Sabatier, whom I have had the honour to perfonally know, are not exaggerated, but strictly conformable to truth.

"VI. That as indigestion, and a number of stomach and other complaints, may arise through the want of sound teeth to masticate the food, I consider the artificial supply of such defects to be very ingenious, and conducive to health, and the present improvement an important discovery.

"From the decided conviction, therefore, that a feries of incontrovertible facts can produce in the mind of a cautious enquirer, I must declare, that the invention of Mr. De Chemant is a real and useful improvement, and justly demands the attention and gratitude of fociety.

" I am, Sir,

"With the best wishes for the success of your invention,

", Yours, &c.

"W. ROWLEY, M. D.

55 Saville-Row, Nov. 7, 1796."

" SIR,

" I have perused, with great attention, and with much pleasure, your French Differtation on artificial teeth. Your obfervations on their utility are founded on the truest principles of physiology and pathology. "The inconveniency, and even the danger arifing from artificial teeth being made of animal fubftances, or being applied by transplantation, must be obvious to every medical man. Your invention removes at once all those difficulties.

"From my own experience, and the observations I have made on your mineral passe, I have had the most convictive reasons to admire it, as the best substance for artificial teeth.

" It is durable and incorruptible, and, in its foft ftate, is fusceptible of receiving the form adapted to fill up the chasm or cavity intended to be rettored. After it is baked to hardness, it is subject to no brittleness, and yet is so hard as to result the strongest efforts without breaking. It has a peculiar toughness, which will not yield to the common mode of drilling glass or china.

" In fhort, it is an invention which is fuperior to any means hitherto employed to repair the lofs of natural teeth, and ought to be univerfally adopted, by profeffional men and practitioners in that branch of furgery, and by every individual who requires their affiftance.

" I have the honour to fubscribe myself,

" Your most obedient humble fervant,

" FRAS. DE VALANGIN.

" Fore-Street, May 10, 1797."

•• SIR,

" I received the favour of your letter, requesting my opinion concerning your mineral passe, in answer to which I have the pleasure to fay, that feveral respectable persons, whom you have accommodated with artificial teeth, have given me an opportunity of examining them, among whom I have permission to mention the Archbisshop of Narbonne, who has a compleat fet. The appearance of your teeth is certainly a beautiful and exact imitation of nature, they are worn with perfect ease, and from the testimony of the parties themselves, they perform the office of trituration extremely well.

" Indeed, when I confider the properties which your compofition poffeffes, that in its foft flate it is fufficiently ductile to take an exact imprefion of the parts to which it is to be adapted, and when hardened, is capable of refifting the utmost force used in mattication; that it is incorruptible, and infoluble in any kind of aliment, confequently inodorous, cleanly, and pleafant in the mouth, and that it permanently retains the colour which you give it to reprefent the gums, and to imitate the natural teeth. In justice to your invention, and with a view to promote the health and comfort of mankind, I cannot hesitate to add my fuffrage to its merit, and to declare my opinion, that it is well calculated to fupply the defects to which the mouth and teeth are liable.

(33)

" I have the honour to be,

ss Sir,

" Your most humble fervant,

" J. EARLE.

" Hanover-Square, May 10, 1797."

"SIR,

"I had already had many occasions to convince myfelf of the fuperiority of your mineral passe over all animal fubstances, which have been made use of until now to make artificial teeth. I had also confidered the gums, and parts of the palate, that you join with them when necessary; the colour of which is as natural as it is durable, a degree of perfection that belongs folely to your discovery.

"In confequence of thefe obfervations, l'advifed Mifs —, who had been much disfigured by the fmall pox, to try your invention, yet, Sir, notwithstanding the good opinion 1 had of it, it was neceffary I should fee the chin, the under lip, and the artificial teeth that you made her, to judge how far it had been possible to remedy the accidents refulting from this illnefs.

" I have remarked with great fatisfaction, that you have remedied, in the most perfect manner, the infirmity and deformity with which she was afflicted, there could only be a sufficience ductile and folid, such as that of your invention, that could unite advantages so precious.

" I have the honour to be,

" Sir,

"Your very obedient, humble fervant, "L. POIGNAND.

" Parliament-Street, January 8, 1797."

« SIR,

"The opinions of fo many refpectable professional men, both in France, and in this country, with regard to the utility of your composition for artificial teeth, have been fo very favourable, that you do not feem to want any more testimonies to recommend the useful discovery to the public; however, as you wish I should fay where I have feen the mineral passe useful, (which never produces any offensive smell or disagreeable breath) it is but justice to acknowledge, that I have found your artificial teeth worn with perfect ease and comfort, and also the palates made by you of the fame composition.

" 1 am, Sir,

" Yoar most obedient, humble servant,

" W. FARQUHAR.

" Great Marlborough-Street, June 5, 1797."

(34)

The Opinion of Mr. Thomas Young, Surgeon, No. 4, Coleman-Street, on the Invention of the Artificial Teeth of Mineral Paste, by Mr. De Chemant, Surgeon-Dentist, No. 1, Frith-Street, Soho.

« SIR,

" As I am of opinion you have accomplished what has long been a defideratum in Surgery, viz. the means of making and applying an artificial palate in cafes of defect, which should poffers the properties of the specimen I have had the opportunity to inspect, I cannot doubt but the public in general, and the afflicted in particular, will be pleafed to hear of it, and receive an authentic testimony of its having been actually used with all the success, and even greater, than at the first view it seemed to promise. The Case of Mr. —, is in point; I have, therefore, fent you a simple narrative of facts as they prefented themselves to me, to which, (as it has relation to the same case) I have subjoined a short testimony, in addition to the many you already posses, of the superior advantages of your artificial teeth, which you have my confent to publish.

"I am, Sir,

" Your humble fervant,

" THOMAS YOUNG.

" Coleman-Street, May 6, 1796.

" A young gentleman fome time fince confulted me, with Mr. De Chemant, on account of a large defect of the bony palate, and of the alveolar proceffes of the upper jaw, with a confequent lois of the front teeth, which they used to fustain. He some time afterwards called on me to fhew me an artificial palate and teeth formed of one piece, which Mr. De Chemant had adapted to, and fixed in the part. By means of this contrivance, the hole in the palate was closed, and he was able to fpeak without that difagreeable lifp, and offenfive nafal found, which is ufual in fuch cafes, and he could swallow his food without any portion of it getting into his nose, as it had before done. The defect of the other part of the upper jaw was filled up with a refemblance of natural teeth and gums, fo that the functions of chewing, as well as of fpeech and of fwallowing (which had been impaired) were restored to him. It was formed of a substance which Mr. De Chemant calls his mineral paste, and was secured in its place, partly by means of its shape, and partly by a ligature, which attached it to the adjoining natural teeth. The gentleman affured me, that he did not fuffer the fmallest degree of pain or inconvenience, but was able again to mingle in fociety, and take his share in the pleasures of conversation, from which he had for fome time been excluded. I have had occasion to observe, in many instances, the superior advantages of Mr. De Chemant's artificial teeth, in the various points of view in which they have been fo justly represented by the Academy of

Sciences, and the Faculty of Medicine of Paris. But there has appeared to me one circumfrance which is not fo ftrongly noticed as it deferves to be, viz. That a composition in the frate of a foft and yielding passe like his, admits more perfectly than any other subfrance of being formed to any shape that may be necessary, whether to supply the defect of palate, gums, and teeth, in the case of a natural fifture; or in case of a defect of teeth only, by moulding it to the support jaw may be correctly imitated, or even improved, which being lost, destroys the beauty of the finest set of features, causes the upper lip to fall in, and produces the appearance of old age in the youngest face."

I might alfo add the approbations of the Royal Society of Medicine, the Royal Academy of Surgery, and the opinions of feveral other phyficians and furgeons; but thefe would exceed the limits of the prefent plan, and the reader would only receive an additional corroboration and repetition of the truths already delivered.

FINIS.

N. B. The author informs the public, that he has lately invented a dining table, very commodious, both for the company and thofe who attend, as one fervant can wait on twenty perfons, without any inconvenience. The form of this table is fuch as to admit a flove in its centre, in the winter time, the heat of which can be diminifhed or increafed at pleafure, to any degree that may be required, by means of an extinguisher or regulator, formed on a principle which may with very little expence be applied to all chimnies, grates, &c. The company at this table have the double advantage of never being incommoded by fervants, because they fland in the front; and also, of keeping their feet conftantly warm, by means of the pipes through which the fmoke paffes, which are contrived to run under the table. The author having obtained his Majefty's Letters Patent for this invention, acquaints the public, that as his time is entirely taken up with his professional employments, he has intrusted the management of this business to Mr. De Valcour, to whom all perfons are requested to apply concerning these articles, at No. 1, Frith-Street, Soho.



